

# United States Senate

WASHINGTON, DC 20510-0504

EX PARTE OR LATE FILED

March 8, 1993

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MAR 24 1993

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

James H. Quello  
Acting Chairman  
Federal Communications Commission  
1919 M Street, N.W.  
Room 802  
Washington, DC 20554

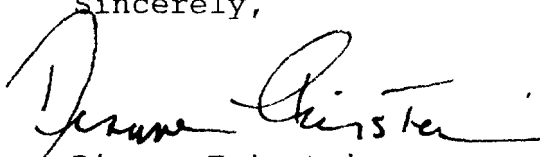
Dear Chairman:

During the past several weeks, I have received numerous letters from constituents who have written to share with me their concerns about proposed regulations issued by the Federal Communications Commission (P.R. Docket Number 92-235).

The proposed modification of policies affecting Private Land Mobile Radio services has drawn significant criticism from operators of radio-controlled aircraft in California. I am forwarding to you copies of the letters I have received from Californians which I believe will outline for you the concerns my constituents have about the proposed regulations.

As the rule making process continues, I request that you review the enclosed letters and will keep my constituents' concerns in mind.

Sincerely,

  
Dianne Feinstein

The Honorable Dianne Feinstein  
United States Senate  
Washington D.C. 20510

Feb. 11, 1993

Dear Senator Feinstein:

I am writing to you in regards to what for me has been a life long passion. My primary leisure time activity is building and flying radio controlled model aircraft. I'm forty three years old and have been involved in the hobby ever since I was a boy, and have received many hours of pleasure from it.

The reason I find it necessary to write to you is the proposal by the Federal Communications Commission to drastically change the rules governing use of radio frequencies in the 72-76 MHz band, which is currently used for radio controlled model aircraft.

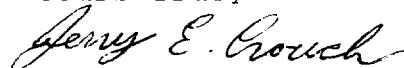
It is my understanding from information I've received from the Academy of Model Aeronautics, which is a national organization of model airplane hobbyist, that the F.C.C. proposal, PR Docket 92-235, will make our radio equipment so prone to interference that it will be unreliable, thereby for all practical purposes eliminating our hobby.

The importance of having reliable radio communication with our aircraft can not be over stressed due to primarily safety to fellow hobbyist and bystanders involved in our hobby activities. Many models have wing spans of ten feet and weigh thirty to forty pounds. If control is lost due to radio interference they are capable of great bodily harm or property damage. Also a considerable amount of time and money is involved in the construction of a R/C model aircraft.

I don't know how familiar you are with our hobby, but let me say that there are many people from youngsters right on up to people in their seventies that I've seen enjoying this hobby. For teenage boys, its a great alternative to hanging out at the mall playing video games and perhaps getting into trouble. There is also a large number of people employed in the industry which supports this hobby, who will be adversely affected by these proposed changes.

I thank you very much for your attention in this matter and hope you will do what you can to stop these proposed changes by the Federal Communications Commission. For the record, yes I did vote for you in the last election. I agree with the things you've been trying to do for our community.

Yours Truly



Jerry Crouch  
3599 Dalton Common  
Fremont, Ca. 94536

JAN 25 1993

1993 FEB -4 11:49

Date: Jan. 22, 1993

The Honorable Diane Feinstein  
U. S. Senator  
909 Montgomery Ave., Suite 202  
San Francisco, CA 94133

J. E. NOHRDEN  
116 Prospect Court  
Santa Cruz, Calif. 95065

Dear Senator Feinstein,

I am very active in a local club whose members enjoy constructing and operating radio-controlled model airplanes. I personally own 3 radios, 10 R/C models and have a workshop full of other products necessary to operating my models.

**I am very concerned about the proposed rule that is currently under consideration by the Federal Communications Commission (FCC). The proceeding is PR Docket 92-235. If adopted the new rule will greatly reduce the usability of frequencies currently assigned for R/C model use and increase the risk of accidents and attendant liability.**

Our radio-control frequencies are in the 72-76 MHz band. This band is primarily used for private land mobile dispatch operations. However, our radio-control frequencies in this band are far enough apart from the land mobile frequencies that we have been able to share the band without either use interfering with the other.

The Notice of Proposed Rule Making (NPRM) in **PR Docket 92-235** replaces Part 90 of the rules with a new Part 88. Part 90 allows for safe use of R/C aircraft and surface models by keeping 10 Khz spacing between fixed commercial users and frequencies used by R/C enthusiasts. The new Part 88 will allow mobile users on frequencies within 2.5 Khz of frequencies available to us, eliminating safe use of at least 31 of the 50 channels on the 72 MHz band (for R/C aircraft) and 10 of the 30 frequencies on the 75 MHz band (for R/C cars and boats) now used by hobbyists. In fact, more channels will likely be affected.

When we operate our R/C models, we go to great lengths to assure the safety of the operators and bystanders and the protection of property. Many of our safety precautions involve the careful coordination and use of the radio control frequencies. If the number of usable frequencies is diminished as proposed by the FCC, the remaining frequencies will become congested and the margin of safety will be greatly decreased.

I don't think it is wise of the FCC to seek to expand the operation conditions of land mobile radio users at the expense of the radio-control modelers. The FCC may not think we are as important as business users of radio, but we have a considerable investment in our models and in our radio equipment. It is a sizeable industry that must be saved from these detrimental FCC actions. The hobby provides many hours of enjoyment to hundreds of thousands of people like myself and contributes to the advancement and development of the commercial aviation industry.

**Please help me continue the safe enjoyment of my pastime by not allowing the FCC to carry out its proposal PR Docket 92-235 for the 72-76 MHz band. We all need your help urgently because the FCC has a deadline of February 26, 1993 after which it may become more difficult to avoid halting these proposals from going into effect.**

Sincerely,

*John E. Nohden*



if the proposed frequency assignment is adopted.

Also - the models I build weigh as much as 15 lbs & travel at up to 110 MPH. Since the proposed new frequencies are so close, interference will occur and cause loss of control of my airplane while in the air. Safety of spectators & cars would be compromised & possible severe injury or even death result. Of course, rather than risk the above - I would have to stop using the radios etc.

Please oppose PR Docket  
92-235

Yours Sincerely  
Don Masse

93 FEB 16 PM 3:58 1/26/93

The Honorable Senator Feinstein  
Dirksen Bldg.  
Washington D.C.

Subject: FCC PROPOSAL  
PR DOCKET 92-235

Action: To squeeze 2 radio  
frequencies between each of  
31 existing frequencies used  
by the FCC

Instruction of parents

...faction to retirees like myself.  
Please don't allow a hobby as  
great as model aircraft and boats  
to get "flushed" in the interest of a  
special interest group. Kell 92-235

Thank you for your time

---

STAN JANEDIS  
6332 TAMARIND ST  
AGOURA CA 91301



February 10, 1992

93 FEB 10 11:57

The Honorable Dianne Feinstein  
United States Senate  
Washington, DC 20510

Dear Senator Feinstein:

A main interest in my life has always been aviation. My formal education was in aeronautical engineering and I have enjoyed the hobby of model aviation for years. I have actively participated in model airplane clubs and have taught model aviation classes in the local high schools. My entire family has been involved with the hobby of radio controlled aircraft.

I am very concerned about the Federal Communications Commissions (FCC) proposed rule changes regarding the frequencies now used by the radio control community. These changes are outlined in NPRM PR Docket 92-235. If adopted, the new rules would greatly reduce the usability of the frequencies assigned for modeling use and increase the risk of accidents and attendant liability for controlling these models.

Our frequencies are in the 72-76 MHz band. This band is primarily used for private land mobile dispatch operations. However, our radio control frequencies are far enough apart from the land mobile frequencies that we have been able to share the band without either use interfering with the other.

Now the FCC wants to create more land mobile frequencies by splitting them into narrower bandwidths and rearranging the band plan. As a result, many land mobile frequencies will be moved closer to the radio frequencies that are presently used for radio control of model airplanes. I am told that of the 50 frequencies that are presently available for the use of radio control of model aircraft, only 19 frequencies will be left if these rules are adopted. The land mobile users are allowed four times the power output of our transmitters and with the proposed frequencies being so close, our radios will be swamped with the land mobile signals on 31 of our frequencies.

When we fly our aircraft under radio control, we go to great lengths to assure the safety of the pilots and any bystanders, not to mention the protection of property. Many of these safety precautions involve the careful coordination of the use different radio frequencies. If the number of usable frequencies is reduced as

proposed by the FCC, the remaining frequencies will become congested and the margin of safety will be greatly reduced.

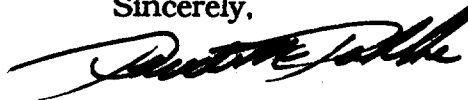
Please understand that these models are not toys but have wingspans of up to 10 feet and can weigh as much as 40 pounds. The models are expensive to build; but more importantly, they are capable of causing serious injury or even death if radio interference causes the operator to lose control of the aircraft. There are many organized events where hundreds of operators participate and thousands of spectators attend. We need the use of our full complement of radio frequencies in order to assure a safe flying environment.

I believe it to be irresponsible of the FCC to seek to add more operating frequencies for the benefit of the land mobile radio industry at the expense of radio control modelers. Over the years we have been moved from the Citizens Band frequencies and have suffered the cost of the FCC's continual narrowing of our frequency band, the last of which was in 1991. The FCC may not think we are as important as business users of radios, but we have a CONSIDERABLE investment in our models and in our radio equipment. The hobby provides many hours of enjoyment for hundreds of thousands of people like myself and contributes to the advancement and development of the commercial aviation industry as well.

Please help us continue the safe enjoyment of my family's pastime by not permitting the FCC to carry out its proposals for the 72-76 MHz band. Please stop NPRM-PR Docket 92-235.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "David M. Dahlke", written in a cursive style.

David. M. Dahlke  
Route 1, Box 400  
Coalinga, CA 93210

Sean B. McCaskey  
1808 Pine Ave.  
San Pablo, CA 94806

The Honorable Dianne Feinstein  
United State Senate  
Washington, D.C. 20510

1993 FEB -4 AM 10: 52

Dear Senator Feinstein,

I am a small business owner and radio control pilot in California. I have been building and flying radio controlled models for 10 years and enjoy my hobby very much. A hobby is what makes the regular work-a-day life a pleasure. I have at least \$4,000 invested in this pastime and am the newsletter editor for a local club with a membership of over 150. I also supported you in the last election.

I am very concerned about a proposed rules changes currently under consideration by the FCC. The proceeding is PR Docket 92-235. If adopted, the new rules will greatly diminish the usable frequencies currently used by modelers like myself and could possibly cause accidents along with liability problems.

Our radios use the 72 - 76 MHz band. This band is primarily used for private land and mobile dispatch operations. At present, our radio frequencies are far enough apart from the land and mobile frequencies so that we can both share the airwaves and operate in a safe manner.

The FCC wants to create more land mobile frequencies by splitting them into narrower bandwidths and rearranging band itself. As a result many mobile frequencies will move closer to

93 FEB -8 PM 4:42

22501 Eunice Ave.,  
Mt. View, CA 94040  
February 4, 1993

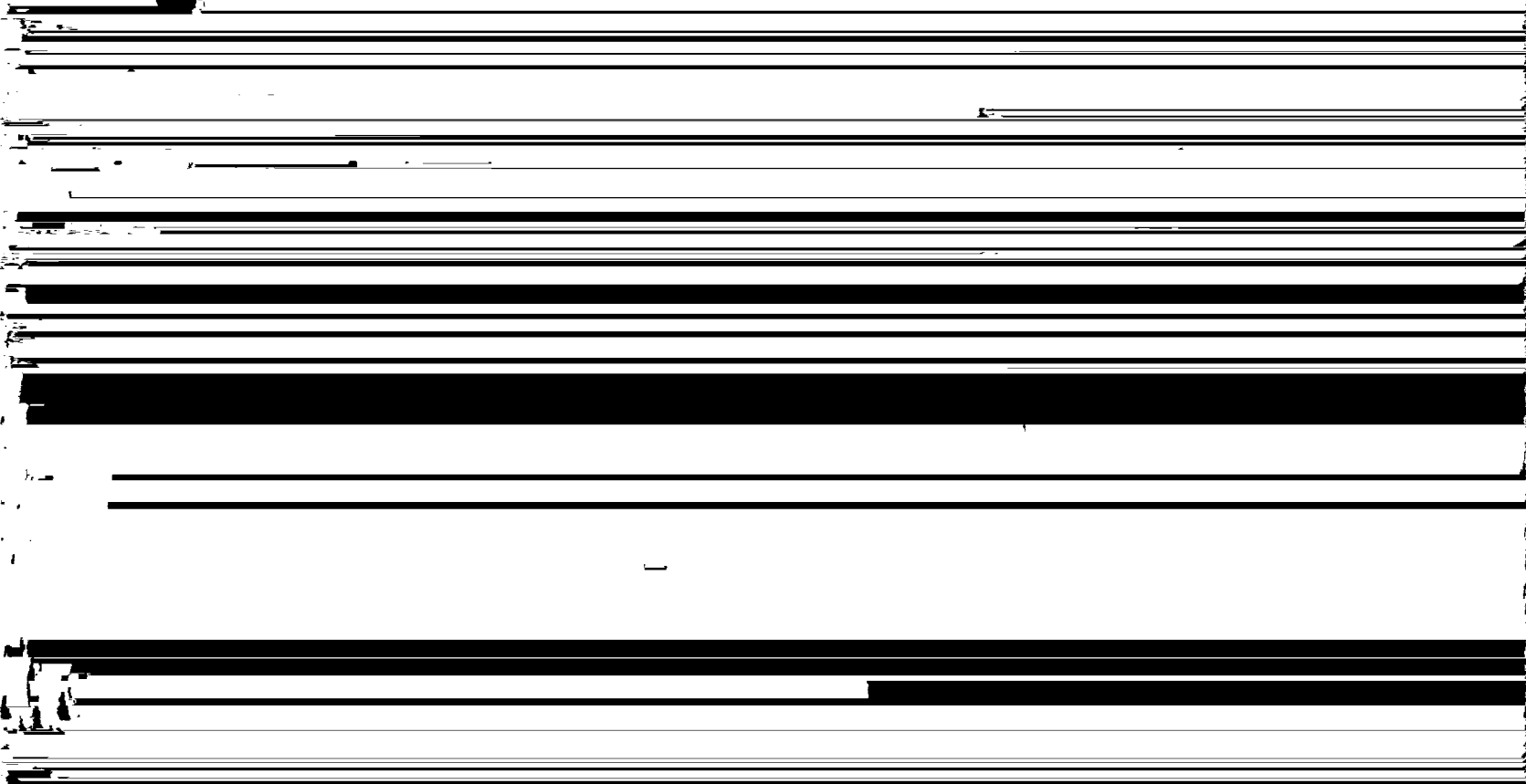
The Honorable Dianne Feinstein  
United States Senate  
Washington, DC 20510

Dear Senator Feinstein:

It has come to my attention that the FCC is considering modifying a certain band of radio frequencies that are of use to me. This Notice of Proposed Rulemaking, PR Docket 95-235 currently under consideration, if adopted, will greatly reduce the usability of frequencies assigned for Radio Control use, and invalidate the operational safety measures that so many have worked so hard to establish and maintain.

I am involved in the sport of Radio Controlled Model Aviation. I am presently a member of the Pioneers Radio Control Club, an affiliate of the Santa Clara Police Activities League (PAL). As responsible members of our community, we voluntarily contribute in excess of \$1000 annually to the PAL, and in addition, we provide demonstrations of aeromodelling to the community, and to special groups under PAL sponsorship. We also encourage youth membership.

I have been active in this sport since 1948, and have participated

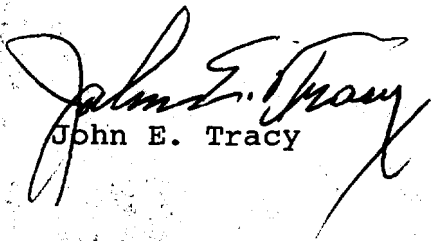


2.5 Khz of the Radio Control frequencies, effectively eliminating at least 40 of the present 50 assigned frequencies.

As part of this sport, safety is of paramount importance. A model can weigh as much as 50 pounds (though most are in the 5 to 15 pound category) and travel between 35 and 100 miles per hour. We fly in certain controlled areas and maintain a sufficient space between operator of the model and spectators to afford a safety zone. Needless to say, radio interference can cause problems and endanger persons and property. Sufficient frequency spacing is one that requires careful coordination. This FCC proposal would invalidate these efforts, allowing mobile users to easily come within range and cause interference, without warning or detectability.

Please help us continue the safe pursuit of our sport, by not allowing the FCC to carry out the PR Docket 92-235 for the 72-76 Mhz band. There is adequate room for their use in other parts of the frequency spectrum. We need your help urgently, as the deadline for response to the NPRM is February 26, 1993.

Very truly yours,

  
John E. Tracy

JAN L. SAVAGE

21781 Michigan Lane  
Lake Forest, CA 92630

1993 FEB -5 PM 3:47 February 2, 1993

The Honorable Dianne Feinstein  
United States Senate  
Washington, D.C. 20510

Dear Senator Feinstein,

I am an active airline pilot who derives many hours of enjoyment of constructing and flying model airplanes as well.

I am very concerned about proposed rule changes under consideration by the FCC. The proceeding is PR Docket 92-235. If adopted, the new rules will greatly reduce the usability of frequencies currently assigned for model use and increase the risk of accidents and attendant liability for controlling model airplanes.

Our radio control frequencies are in the 72-76 MHz band. This band is primarily used for land mobile dispatch operations. Our radio frequencies in this band are far enough apart from land mobile use to be able to share the band without interference from each other. The FCC proposes to change that.

Now the FCC wants to create more land mobile frequencies by splitting them into narrower bandwidths and rearranging the band plan. As a result, many land mobile will move closer to the radio control frequencies and cause interference to radio control operations. I stress CONTROL. Understand that of the 50 frequencies that are presently available, only 19 will be left if these new rules are adopted. That is too few for the thousands of us who use these frequencies.

When we fly our model airplanes under radio control, we go to great lengths to assure the safety of both bystanders, operators and the public at large. Safety precautions involve

We need the use of our full complement of radio frequencies in order to assure a safe flying environment.

I do not think it is wise of the FCC to seek to improve the operating conditions of land mobile communications at the expense of radio control modelers. The FCC may not think we are as important as business users of radios, but we have a considerable amount of money and time invested in our time and equipment. The hobby provides many hours of enjoyment to thousands of people like myself and contributes to the advancement and development of the commercial aviation industry.

Please help me continue the safe enjoyment of my pastime by not allowing the FCC to carry out its proposals for the 72-76 MHz band.

Sincerely,



013 FEB 14 PM 6:56

The Honorable Diane Feinstein  
1993 United States Senate  
Washington, D.C. 20510

28 January

Dear Senator Feinstein,

I am a 44 year old professional law enforcement helicopter pilot who has been involved in model aviation since I was 8 years old . Building and flying model aircraft had a great deal to do with my career path as I grew to adulthood . I current design, build and fly radio control model sailplanes as a hobby .

I am very concerned about proposed rules that are currently under consideration by the Federal Communications Commission (FCC). The proceeding is PR Docket 92-235 . If adopted, the new rules will greatly reduce the usability of frequencies currently assigned for model use and increase the risk of accidents and attendant liability for controlling model airplanes .

Our radio control frequencies are in the 72 - 76 MHz band . This band is primarily used for private land mobile dispatch operations . However, our radio control frequencies in this band are far enough apart from the land mobile frequencies that we have been able to share the band without either use interfering with the other .

Now the FCC wants to create more land mobile frequencies by splitting them into narrower bandwidths and rearranging the band plan . As a result, many land mobile frequencies will move closer to the radio control frequencies and cause interference to radio control operations . I am told that of the 50 frequencies that are presently available for radio control of model airplanes, only 19 frequencies will be left if these rules are adopted .

When we fly our model airplanes under radio control, we go to great lengths to assure the safety of the operators and bystanders and the protection of property . Many of our safety precautions involve the careful coordination and use of the radio control frequencies . If the number of usable frequencies is diminished as proposed by the FCC, the remaining frequencies will become congested and the margin of safety will be greatly decreased .

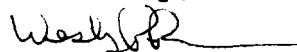


Please understand that many model airplanes have wing spans up to 10 feet and weigh as much as 30 or 40 pounds . The models themselves are expensive to build; but more to the point they are capable of causing property damage, serious injury, or even death if radio interference causes the operator to lose control of the craft . We often fly our models at organized events where hundreds of operators participate . We need the use of our full complement of radio frequencies in order to assure a safe flying environment .

I do not think it is wise of the FCC to seek to improve the operating conditions of land mobile radio users at the expense of radio control modelers . The FCC may not think we are as important as business users of radios, but we have a considerable investment in our models and radio equipment . The hobby provides many hours of enjoyment to thousands of people like myself and helps to direct young people in career paths in the aviation fields .

Since the radio frequency spectrum is considered public property I feel it is only proper that it should be used to the benefit of as many people as possible . The radio control frequencies compose a very small portion of the spectrum that is utilized by many thousands of persons . Please help me continue the safe enjoyment of my pastime by not allowing the FCC to carry out its proposals for the 72-76 MHz band .

Sincerely,



Wesley P Pearson

Wesley Pearson  
1855 El Paso Lane  
Fullerton, CA 92633



# THE CLASS THAT BUILT AND FLEW

Getting into it—  
Right: Andy  
Rodriguez takes  
his turn with the  
throttle control.

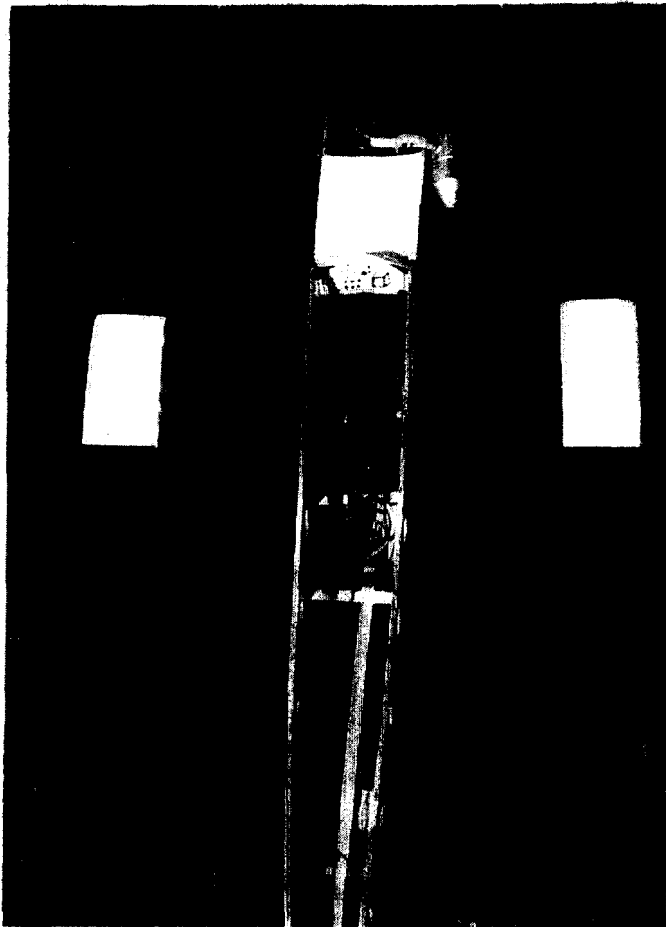
■ Wayne R. Lehman

**P**UT a modeler in the classroom, and sooner or later you'll see some action. Here's the story of one such occasion.

"I am a fourth-grade teacher at Locust Grove Mennonite School just east of Lancaster, Pennsylvania. I also build model airplanes.

"In March 1991, our class was studying people, industries, and transportation in the social studies textbook. The next lesson, 'How an Airplane Is Made,' explained how groups of people cooperate to produce jet  
responsible for Boeing's Seattle plant. The





**Above:** Kids line up awaiting their turn as copilots. After a safety lesson, they took off at full tilt. The author's project proved to be the highlight of the school year.

**Left:** Detail showing location of internal control components. The RC receiver is under the dummy cockpit floor. A lone servo controls the model's throttle.

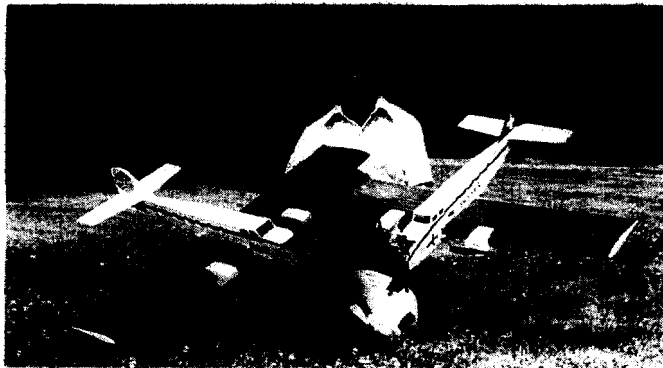
airplane or two. Knowing how young people take pride in their homeroom's accomplishments, I decided to go for two—one for each class.

**"So began an endeavor** that at times seemed overwhelming, but in the end was most rewarding.

"I considered just what form the craft should take. I wanted to involve my students as much as possible at every step, so I needed something that could be rather crudely built and yet fly.

"The forgiving characteristics of a control line model seemed most appropriate. But one can't expect 36 grade-schoolers to be able to fly control line on short notice. So I planned to install a throttle servo and let the kids play copilot via RC while I took charge of the *ups and downs* at the handle. I thought the worst that could happen, if a child suddenly cut the throttle, would be a landing.

"My next decision was what model to build. I wanted it to be an airliner and to at least be recognizable as a scale model. Ideally, we should have manufactured a 747, but its configuration doesn't match our building and flying expectations. I leafed through Rolfe and Dawydoff's *Airplanes of the World* several times, and kept returning to a 1930s French airliner called the Dewoitine D. 332. The lines were simple and it had a boxy look. Best of all, it was a trimotor. Since I had only one engine—an O.S. .20—a propeller on the nose would still be scalelike, and it would be easy to construct two freewheeler dummy props for the wings.



I used typical dimensions for

January 24, 1993

93 JAN 28 AM 9:46

Dear Senator Feinstein:

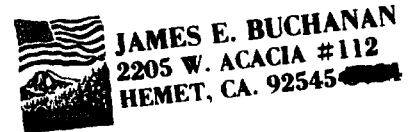
I have at least three thousands dollars invested in equipment for the internationally recognized SPORT of flying radio controlled miniature aircraft. I have just learned that the FCC is proposing

# Umat San Jacinto

The Honorable Dianne Feinstein  
331 Hart Senate Office Building  
Washington, D.C. 20510

93-177-3 January 21, 1993

Subject: FCC NPRM Pr Docket 92-235



Dear Senator Feinstein:

Let me begin by congratulating you on your recent election. Here's hoping things will change for the better in Washington. I am writing to request your assistance in the rejection of the subject proposal presently before the F.C.C. for adoption.

During the last five years we in the Radio Control Model hobby were required to replace all our equipment because the F.C.C. decreased our frequency spacing from 20 Khz to 10 Khz. The equipment replacement was very expensive and now they would all be obsoleted by this docket changing the spacing to 2.5 Khz.

Most of us have been interested in Radio Controlled Models for over thirty years and we spend much of our leisure time trying to help the younger generation to learn what a great hobby-sport this is. Certainly this wonderful pastime offers young people a great alternative to drugs, for this reason alone it is worthwhile.

This proposal, if adopted, would preclude the safe operation of model aircraft and make the operators subject to litigation for accidents caused by radio interference. The models I fly are large, fast, and expensive, therefore I take every precaution to operate them safely. There is no precaution I could take to prevent an accident caused by radio interference by another radio broadcasting perhaps miles away on a frequency only 2.5 Khz. away from my radio.

It is for the reasons I have stated that the proposals in FCC. NPRM PR Docket 92-235 to add frequencies between model and commercial frequencies not be adopted.

Sincerely

*Jim Buchanan*

I AM 76 YEARS OLD AND HAVE ENJOYED THE R/C  
HOBBY FOR THIRTY PLUS YEARS AND WOULD  
CERTAINLY BE LOST WITHOUT IT.  
PLEASE DO WHAT YOU CAN TO DEFEAT THIS  
DOCKET.  
THANKS *J*

January 27, 1993

The Honorable Dianne Feinstein  
Dirksen Building, Room 368  
Washington, D.C. 20510

93 FEB -2 PM 4:13

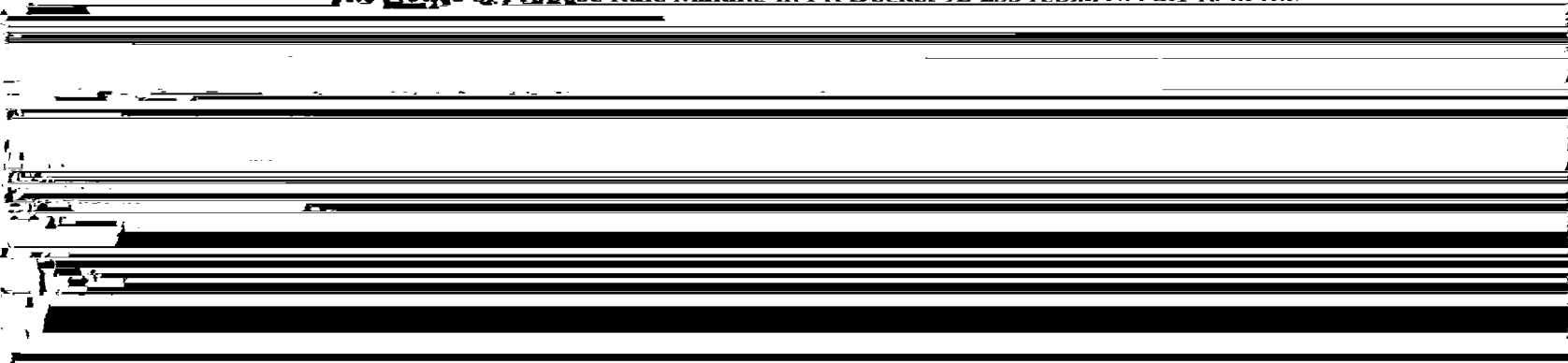
Dear Senator Feinstein:

I am a retired police officer, living on a disability pension, and the money I spend on my hobby is hard to come by. I have been building and flying model aircraft for fifty years, and radio controlled airplanes for the last thirty years. I derive many hours of pleasure and satisfaction from building and flying my planes. I am active in a local club, the Channel Islands Condors, which boasts over 200 members who share my interest in building and flying model aircraft. At the present time, I have five radio systems, and six functioning aircraft. I have a lot of money invested in those radios and aircraft, and in the engines, tools, chargers, field accessories, and other products necessary to support my hobby.

I am very concerned about the proposed rules that are currently under consideration by the Federal Communications Commission (FCC). The proceeding is PR Docket 92-235. If adopted, the new rules will greatly reduce the usability of frequencies currently assigned for R/C model use and will increase the risk of accidents and attendant liability.

Our radio control frequencies are in the 72-76 MHz band. This band is used for private land mobile dispatch operations. However, our radio control frequencies in this band are far enough apart from the land mobile frequencies that we have been able to share the band without either use interfering with the other.

The Notice of Propose Rule Making in PR Docket 92-235 replaces Part 90 of the





and growing industry, which provides jobs for thousands of people. The hobby itself provides many hours of enjoyment and relaxation to hundreds of thousands of people like myself, and contributes to the advancement and development of the commercial aviation industry.

**Please help me continue the safe enjoyment of my pastime by not allowing the FCC to carry out its proposal PR 92-235 for the 72-76 MHz band. We all need your help urgently because the FCC has a deadline of February 26, 1993 after which it may become more difficult to keep these proposals from going into effect.**

Sincerely,

A handwritten signature in black ink that reads "Robert E. Gray". The signature is written in a cursive style with a large, stylized "R" and "G".

Robert E. Gray  
2700 Kelp Street  
Oxnard, CA 93035